

Amendments to the Claims

1. (currently amended) A surgical instrument, comprising:
 an end effector;
 a shaft having a longitudinal axis and including an articulation motion transfer member;
 an articulation mechanism responsive to the articulation motion and pivotally coupling the end effector to a distal end of the shaft in an articulation plane bisected by the longitudinal axis; and
 an articulation control coupled to a proximal portion of the shaft, comprising:
 an actuator laterally and linearly positionable by a user, the lateral motion therefrom aligned to the articulation plane to intuitively correspond to the direction of articulation, and
 a motion conversion mechanism coupled to the actuator and to the articulation mechanism and operably configured to convert [a] the lateral motion from the articulation control to an articulation motion.

2. (currently amended) [The] A surgical instrument [of claim 1, wherein the], comprising:
 an end effector;
 a shaft including an articulation motion transfer member;
 an articulation mechanism responsive to the articulation motion and pivotally coupling the end effector to a distal end of the shaft; and
 an articulation control [further comprises] coupled to a proximal portion of the shaft,
 comprising:
 an actuator laterally positionable by a user,
 a longitudinal control rod coupled to the end effector at an attachment offset from a pivot axis of the articulation mechanism, and
 [u] wherein the] a motion conversion mechanism coupled to the actuator and to the articulation mechanism [is] operably configured to convert a [the] lateral motion from the articulation control to [the] a longitudinal motion.

3. (original) The surgical instrument of claim 2, wherein the motion conversion mechanism comprises a gear means for coupling the lateral movement to the longitudinal motion.

4. (original) The surgical instrument of claim 2, wherein the motion conversion mechanism comprises:

- a lateral gear rack coupled to the articulation control;
- a gear engaged to the gear rack of the articulation control; and
- a longitudinal gear rack coupled to the longitudinal control rod and engaged to the gear.

5. (original) The surgical instrument of claim 1, wherein the shaft further comprises an articulation drive tube transferring the articulation motion as a rotational motion to the articulation mechanism.

6. (original) The surgical instrument of claim 5, wherein the motion conversion mechanism comprises a gear means for coupling the lateral movement to the rotational motion.

7. (currently amended) A [The] surgical instrument [of claim 5, wherein the], comprising:
an end effector;
a shaft including an articulation drive tube having a gear section for transferring an
articulation rotational motion;
an articulation mechanism responsive to the articulation rotational motion and pivotally
coupling the end effector to a distal end of the shaft; and
an articulation control coupled to a proximal portion of the shaft, comprising:
an actuator laterally positionable by a user, and
a motion conversion mechanism comprising [comprises] a lateral gear rack coupled to the
[articulation control] actuator and to the gear section of the articulation drive tube
[includes a gear section engaged to the lateral gear rack] to convert a lateral motion
from the actuator to the articulation rotational motion.

8. (currently amended) The surgical instrument of claim 7, wherein the motion conversion mechanism further comprises a backdrive lockout mechanism coupling the [articulation control] actuator to the lateral gear rack.

9. (original) The surgical instrument of claim 8, wherein the backdrive lockout mechanism comprises:

a frame having a window;

a lockout member laterally locked into position with the window of the frame and coupled to the lateral gear rack; and

a deflection member coupled to the articulation control and positioned to disengage and to laterally position the lockout member.

10. (original) The surgical instrument of claim 8, wherein the backdrive lockout mechanism comprises a means for preventing transferring motion from the articulation drive tube to the articulation mechanism.

11. (canceled) A surgical instrument, comprising:

a shaft configured to independently transfer an actuating motion, and a rotational motion about a longitudinal axis thereof;

an end effector responsive to the actuating motion;

an articulation mechanism responsive to the rotational motion to articulate the end effector from the longitudinal axis of the shaft;

a handle portion coupled to the shaft operably configured to produce the actuating motion;

a lateral articulation control laterally positionable by a user and operably configured to produce the rotational motion.

12. (currently amended) [The] A surgical instrument [of claim 11], comprising:

a shaft configured to independently transfer an actuating motion, and a rotational motion about a longitudinal axis thereof;

an end effector responsive to the actuating motion;

an articulation mechanism responsive to the rotational motion to articulate the end effector from the longitudinal axis of the shaft;
a handle portion coupled to the shaft operably configured to produce the actuating motion;
a lateral articulation control laterally positionable by a user and operably configured to produce the rotational motion, wherein the lateral articulation control further comprises a backdrive lockout mechanism.

13. (original) A surgical instrument comprising:

a handle portion operable to produce a firing motion, a closing motion, and an articulation motion;
a shaft coupled to the handle portion operable to separately transfer the firing motion, the closing motion, and the articulation motion;
an elongate channel coupled to the shaft;
an anvil pivotally coupled to the elongate channel, responsive to the closing motion from the shaft;
a firing device including a distally presented cutting edge longitudinally received between the elongate channel and the anvil;
an articulation mechanism pivoting the elongate channel from the shaft in response to the articulation motion; and
a lateral articulation control laterally positionable by a user and operably configured to produce the articulation motion.

14. (currently amended) [The] A surgical instrument [of claim 13], comprising:

a handle portion operable to produce a firing motion, a closing motion, and an articulation motion;
a shaft coupled to the handle portion operable to separately transfer the firing motion, the closing motion, and the articulation motion;
an elongate channel coupled to the shaft;
an anvil pivotally coupled to the elongate channel, responsive to the closing motion from the shaft;

a firing device including a distally presented cutting edge longitudinally received between the elongate channel and the anvil;
an articulation mechanism pivoting the elongate channel from the shaft in response to the articulation motion; and
a lateral articulation control laterally positionable by a user and operably configured to produce the articulation motion, wherein the lateral articulation control further comprises a backdrive lockout mechanism.

15. (currently amended) A surgical instrument, comprising:

a shaft defining a longitudinal axis of the surgical instrument;
an end effector movable from a first position in alignment with said longitudinal axis to a second position at an angle with said longitudinal axis;
a rotatable member operably coupled with said end effector such that rotation of said member moves said end effector from said first to said second position; and
a lateral control member moveable laterally and linearly to said longitudinal axis in corresponding alignment with a plane formed by the end effector in moving between first and second positions and operably coupled to said rotatable member, wherein lateral movement of said lateral control member moves said end effector from said first to said second position.